

WHAT IS CLAIMED IS:

1 1. An air conditioner control device (6) which controls an air conditioner
2 (51) in accordance with a speech-based instruction, comprising:

3 means (6) which detects an operational status of an external device (5)
4 including said air conditioner (51) in response to input of said speech-based instruction; and
5 means (6) which controls not only said air conditioner (51) but also devices
6 (52, 53, 54, and 55) other than said air conditioner device in such a way that a condition
7 desired by an utterer of said speech is obtained based on an operational status detected by
8 said operational status detection means.

1 2. An air conditioner control device (6) which controls an air conditioner
2 (51) in accordance with a speech-based instruction, comprising:

3 means (6) which detects operational statuses of said air conditioner (51) and a
4 window in response to input of said speech-based instruction; and
5 means (6) which controls not only said air conditioner (51) but also an
6 operation of closing said window in such a way that a condition desired by an utterer of said
7 speech is obtained when an operational status detected by said operational status detection
8 means indicates that the window is open.

1 3. An air conditioner control device comprising:

2 speech recognition means (2) which acquires speech data representing a
3 speech, and specifies a candidate of a phrase represented by said speech by performing
4 speech recognition on said speech data; and

5 air conditioner control means (6) which specifies a variable to be changed for
6 obtaining a condition desired by an utterer of said speech and/or a direction in which said
7 variable should change, based on a candidate specified by said speech recognition means (2),
8 environmental data indicating a condition of an environment under which a conditioning by
9 an external air conditioner (51) is performed and/or operational status data indicating an
10 operational status of said air conditioner (51), and controls said air conditioner (51) in such a
11 way that a specified variable changes in a specified direction.

1 4. The air conditioner control device according to claim 3, wherein said
2 air conditioner control means (6) further controls devices (52, 53, 54, and 55) other than said
3 air conditioner (51),

4 specifies a device (5) to be controlled to change a variable to be changed for
5 obtaining a condition desired by an utterer of said speech based on a candidate specified by
6 said speech recognition means (2), said environmental data, and/or said operational status
7 data, and controls a specified device (5) in such a way that a specified variable changes in a
8 specified direction.

1 5. The air conditioner control device according to claim 3 or 4, wherein
2 said air conditioner control means (6) has:

3 means (6) which discriminates whether or not the utterer of said speech feels
4 comfortable with a current condition based on a candidate specified by said speech
5 recognition means (2), and stores a condition indicated by environmental data to be supplied
6 at a time when it is discriminated that the utterer feels comfortable; and

7 means (6) which discriminates whether or not the utterer of said speech desires
8 to obtain a condition with which the utterer felt comfortable in the past based on a candidate
9 specified by said speech recognition means (2), and upon determination that the utterer
10 desires, refers locally stored past environmental data, specifies a variable to be changed for
11 obtaining a condition indicated by the referred past environmental data and/or a direction in
12 which said variable should change, and controls said air conditioner (51) in such a way that a
13 specified variable changes in a specified direction.

1 6. An air conditioner control apparatus comprising:
2 air conditioner control means (6) which specifies a variable to be changed to
3 obtain a desired condition and/or a direction in which said variable should change, and
4 controls an external device (5) including an air conditioner (51) in such a way that a specified
5 variable changes in a specified direction; and

6 simulation means (6) which executes a simulation regarding a shift of a
7 condition under a control being executed by said air conditioner control means (6),

8 wherein said air conditioner control means (6) discriminates whether a
9 conditioning method should be changed or not based on a result of said simulation and
10 environmental data indicating a condition of an environment under which a conditioning by
11 said air conditioner (51) is performed, and upon discrimination that it should be changed,
12 outputs a message urging a change of the conditioning method or changes a mode of a control
13 of said device (5).

1 7. An air conditioner control method of an air conditioner control device
2 (6) which controls an air conditioner (51) in accordance with a speech-based instruction,
3 comprising:

4 a step of detecting an operational status of an external device (5) including
5 said air conditioner (51) in response to input of said speech-based instruction; and

6 a step of controlling devices (52, 53, 54, and 55) other than said air
7 conditioner device as well as said air conditioner (51) in such a way that a condition desired
8 by an utterer of said speech is obtained based on an operational status detected by said
9 operational status detection means.

1 8. An air conditioner control method comprising:

2 a speech recognition step of acquiring speech data representing a speech, and
3 specifying a candidate of a phrase represented by said speech by performing speech
4 recognition on said speech data; and

5 an air conditioner control step of specifying a variable to be changed for
6 obtaining a condition desired by an utterer of said speech and/or a direction in which said
7 variable should change, based on a candidate specified by said speech recognition step,
8 environmental data indicating a condition of an environment under which a conditioning by
9 an external air conditioner (51) is performed and/or operational status data indicating an
10 operational status of said air conditioner (51), and controlling said air conditioner (51) in such
11 a way that a specified variable changes in a specified direction.

1 9. An air conditioner control method comprising:

2 an air conditioner control step of specifying a variable to be changed to obtain
3 a desired condition and/or a direction in which said variable should change, and controlling
4 an external device (5) including an air conditioner (51) in such a way that a specified variable
5 changes in a specified direction; and

6 a simulation step of executing a simulation regarding a shift of a condition
7 under a control being executed by said air conditioner control means,

8 wherein in said air conditioner control step, it is discriminated whether a
9 conditioning method should be changed or not based on a result of said simulation and
10 environmental data indicating a condition of an environment under which a conditioning by
11 said air conditioner (51) is performed, and when it is discriminated that the conditioning

- 12 method should be changed, a message urging a change of the conditioning method is output,
- 13 or a mode of a control of said device (5) is changed.